

I CLAIM

1. A motion picture reel comprised of separable components including:

a hub having an outer ring with a peripheral, cylindrical outer surface and a hollow, cylindrical tubular sleeve located coaxially therewithin, and

5 a pair of side retainers each having an axis of rotation and a hub engaging portion with inner and outer surfaces and a releaseable hub latching member formed thereon, and a central core portion located on said inner surface of said flat hub engaging portion, and said central core portion includes a prong projecting away from said inner surface and terminating in a hooked tip, and a prong receiving socket
10 defining a bearing ledge facing said inner surface, and said prong and said socket are located in diametrical opposition from each other and at a radial distance from said retainer axis of rotation, whereby said side retainers are positionable on opposing sides of said hub with said side retainers and said hub all in coaxial alignment and with said cores of said side retainers projecting into said tubular sleeve of said hub from opposing
15 sides thereof, and said hub latching members of said side retainers engage said hub so that said hub holds said side retainers a spaced distance apart from each other and said hooked tips of said prongs engage in said sockets, unless said hub latching members are released.

2. A motion picture reel according to Claim 1 wherein said core portions each include a body having a height equal to no greater than one-half the length of said tubular sleeve and with said prong projecting beyond said height of said body parallel

to said retainer axis of rotation, and said body is formed with an outer diameter so that
5 said body fits smoothly into said tubular sleeve of said hub and resides in contact
therewith.

3. A motion picture reel according to Claim 2 wherein said tips of said
prongs define hooks that project in a tangential direction relative to said retainer axis of
rotation, and said socket of each core is formed as a cavity in said body defining a
bearing ledge within said body that also lies in a tangential direction relative to said
5 retainer axis of rotation and facing said hub engaging portion upon which said core is
formed, and said hook and said bearing ledge reside at the same radial distance from
said retainer axis of rotation.

4. A motion picture film reel according to Claim 2 wherein said hub
includes a plurality of radial spokes joining said outer ring to said tubular sleeve, and
said hub latching members are each formed as a resilient finger from the structure of
said hub engaging portion extending over a circular arc centered on said retainer axis of
5 rotation and having fixed and deflectable ends, and a lug is formed projecting from said
inner surface of said hub engaging portion at said deflectable end of said finger,
whereby said hub latching members of said side retainers are engageable with selected
ones of said spokes when said side retainers are assembled with said hub.

5. A motion picture reel according to Claim 4 wherein said lugs meet said
selected ones of said spokes in abutting relationship therewith when said side retainers
are assembled with said hub.

6. A motion picture reel according to Claim 2 wherein said hub is comprised of at least one radial spoke extending between said outer ring and said tubular sleeve and across said spaced distance between said side retainers, and each of said hub latching members on each of said side retainers is movable between a latching position projecting from said inner surface of said hub engaging portion inwardly toward said hub thereby blocking rotation of said at least one spoke, and alternatively movable outwardly from said outer surface of said hub engaging portion to a withdrawn disengaged position.

7. A motion picture reel formed of separable and releaseably engageable components including:

a pair of laterally confining retaining members each having a circular perimeter and a central, retainer axis of rotation and each including a hub engaging portion having inner and outer surfaces with a releaseable hub engaging latch located on said inner surface at a first spaced radial distance from said retainer axis, and a core centered on said retainer axis and projecting in a direction perpendicular to said inner surface, and each of said cores includes a prong located at a second spaced radial distance from said retainer axis and oriented parallel thereto and terminating in a hook, and each of said cores further includes a prong receiving cavity with a bearing ledge facing said hub engaging portion of said retaining member and said prong receiving cavity is located diametrically opposite said prong and at the same second spaced radial distance from said retainer axis as said prong, and

a disk-shaped annular hub formed with a peripheral rim and a
central, tubular sleeve, and a uniform height throughout, and wherein said hub is
engageable between said laterally confining retaining members when said laterally
confining retaining members are oriented with said inner surfaces of said hub engaging
portions facing each other and in mutually coaxial alignment with each other and with
said hub, and said cores of said retaining members are inserted into said tubular sleeve
of said hub from opposite directions so that said hooks of said prongs engage said
bearing ledges and said hub engaging latches engage said hub to prevent disengagement
of said hooks from said bearing ledges unless said hub engaging latches are released.

8. A motion picture reel according to Claim 7 wherein both said bearing
ledge and said hook are oriented tangentially in the same angular direction relative to
said retainer axis at said second, spaced distance therefrom.

9. A motion picture reel according to Claim 7 wherein said retaining
members are engageable with each other with said hub disposed therebetween by
advancement of said cores of said retaining members toward each other, whereby said
prongs enter said prong receiving cavities and are engaged therewith by relative
rotation between said retaining members and engagement of said latching member with
said hub.

10. A motion picture reel according to Claim 7 wherein each of said cores is
formed with a body having a circular, arcuate periphery centered on said retainer axis
and said body has a length no greater than half said height of said hub and no less than

one-third said height of said hub.

11. A motion picture reel according to Claim 7 wherein said hub engaging latches are comprised of resilient fingers having opposing attached free ends and are formed from the structure of said hub engaging portions of said retaining members, and further comprising lugs projecting from said free ends of said resilient fingers in a direction parallel to said prongs.

12. A motion picture reel according to Claim 11 wherein said hub is equipped with a plurality of radial spokes extending between said peripheral rim and said tubular sleeve, and said fingers extend in a circular arc centered on said retainer axis.

13. A motion picture film reel comprising:

a pair of retaining members each formed with a side cheek-plate member having inner and outer surfaces, a central axis of rotation, an outer circular perimeter, and an inner core concentric relative to said central axis of rotation, and a resilient finger defined in said cheek-plate member and including a latching member thereon projecting from said inner cheek-plate surface in a direction normal to said cheek-plate, and said inner core is formed with an arcuate outer shape on said inner cheek-plate surface with a prong projecting therefrom away from said inner surface of said cheek-plate member and having a tip terminating in a hook, and diametrically opposite said prong, a prong receiving cavity having a bearing ledge is defined in said core, and said hook and said bearing ledge are directed in the same angular direction relative to said core, and at the same radial distance from said central axis of rotation,

and

15 a disk-shaped annular hub having a central, tubular sleeve, a
plurality of spokes projecting radially from said sleeve, a ring-shaped peripheral rim
held by said spokes to said central, tubular sleeve, and said retaining members are
engageable with each other when oriented with their inner surfaces facing each other
with said hub interposed therebetween and with said cores of said retaining members
projecting within said tubular sleeve of said hub, and when said retaining members are
20 twisted angularly relative to each other to bring said hooks on each prong of each
retaining member to meet said bearing ledge of each other retaining member, and said
hooks are thereupon held in contact with said bearing ledges by the thickness of said
hub, while said latching members of said fingers reside in abutment against selected
ones of said spokes to prevent relative rotation between said retaining members unless
25 said fingers are deflected outwardly from said outer surfaces of said cheek-plate
members to disengage said latching members from said spokes.

14. A motion picture reel according to Claim 13 wherein said central, axial
cores each have a disk-shaped configuration and said cores fit smoothly into said
tubular sleeve of said hub from opposite sides thereof.